IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1.   (PREVIOUSLY PRESENTED) A switching device for controlling a connection between at least one private computer, at least one terminal corresponding to the at least one private computer, and a shared computer that can be operated by the at least one terminal, the switching device comprising:

a connecting unit that connects each terminal to a corresponding private computer in a default status, and switches a connection destination of the terminal to a private computer corresponding to said terminal or the shared computer when a connection switching request transmitted from said terminal has been received; and

a security unit that executes for each terminal, identification processing of data that has been received from any one terminal and output to the private computer or the shared computer, said identification processing including utilizing an identifier corresponding to a connector through which a terminal is connected to encipher a received key code.

2.   (PREVIOUSLY PRESENTED) The switching device according to Claim 1, wherein
the security unit comprises:

an enciphering unit that executes an enciphering processing local to each terminal, of ~~the~~ data that has been transmitted from any one terminal and received by the switching device;

a first deciphering unit that executes a deciphering processing corresponding to the enciphering processing local to the terminal corresponding to the at least one private computer, of the data that has been output from the switching device to any one private computer; and

a second deciphering unit that executes a deciphering processing corresponding to the enciphering processing local to the terminal currently connected to the shared computer, of the data that has been output from the switching device to the shared computer.

3.   (PREVIOUSLY PRESENTED) The switching device according to Claim 2, wherein

the enciphering unit bit shifts the received data to a first direction between a highest bit and a lowest bit by only a number of each terminal,

the first deciphering unit bit shifts output data to a second direction opposite to the first direction by a number of a terminal corresponding to the at least one private computer, and

the second deciphering unit bit shifts the output data to a second direction opposite to the first direction by a number of a terminal currently connected to the shared computer.

4.   (PREVIOUSLY PRESENTED) The switching device according to Claim 1, wherein

the connecting unit comprises:

a detecting unit that detects whether or not a key code of a predetermined key transmitted from any terminal has been received by a predetermined number during a predetermined period of time; and

a switching unit that cancels a connection of the terminal when the terminal has been connected to the shared computer, and switches the connection to a private computer corresponding to the terminal, that cancels a connection of the terminal when the terminal has been connected to a private computer corresponding to the terminal, and switches the connection to the shared computer, and that disregards the connection switching request when a terminal other than the corresponding terminal has already been connected to the shared computer, at a time when the detecting unit has performed detecting.

5.   (PREVIOUSLY PRESENTED) The switching device according to Claim 1, further comprising a posting unit that posts a connection status of the shared computer to each terminal.

6.   (PREVIOUSLY PRESENTED) The switching device according to Claim 5, wherein the posting unit posts to each terminal, that the shared computer is currently being used, when the shared computer is currently being connected to any terminal.

7.   (PREVIOUSLY PRESENTED) A switching method in a switching device for controlling a connection between at least one private computer, at least one terminal corresponding to the at least one private computer, and a shared computer that can be operated by the at least one terminal, the switching method comprising:

connecting each terminal to a corresponding private computer in a default status, and a

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connection destination of the terminal is switched to a private computer corresponding to said terminal or the shared computer when a connection switching request transmitted from said terminal has been received; and

identification processing for each terminal executed on data that has been received from any one terminal and output to the at least one private computer or the shared computer, said identification processing including utilizing an identifier corresponding to a connector through which a terminal is connected to encipher a received key code.

8.　　(PREVIOUSLY PRESENTED)　The switching method according to Claim 7, wherein

the security comprises:

enciphering processing of each terminal executed on the data that has been transmitted from any one terminal and received by the switching device;

deciphering processing corresponding to the enciphering processing of the terminal corresponding to the at least one private computer executed of the data that has been output from the switching device to any one private computer; and

deciphering processing corresponding to the enciphering processing of the terminal currently connected to the shared computer executed for data that has been output from the switching device to the shared computer.

9.　　(PREVIOUSLY PRESENTED)　The switching method according to Claim 8, wherein

during the enciphering processing , the received data is bit shifted to a first direction between a highest bit and a lowest bit by only a number of each terminal,

during the first deciphering processing, the output data is bit shifted to a second direction opposite to the first direction by a number of a terminal corresponding to the at least one private computer, and

during the second deciphering processing , output data is bit shifted to a second direction opposite to the first direction by a number of a terminal currently connected to the shared computer.

10.　　(PREVIOUSLY PRESENTED)　The switching method according to Claim 7, wherein

the connection comprises:

detecting whether or not a key code of a predetermined key transmitted from any terminal has been received by a predetermined number during a predetermined period of time; and

switching at during which a connection of the terminal is canceled when the terminal has been connected to the shared computer, and the connection is switched to a private computer corresponding to the terminal, a connection of the terminal is canceled when the terminal has been connected to a private computer corresponding to the terminal, and the connection is switched to the shared computer, and the connection switching request is disregarded when a terminal other than the corresponding terminal has already been connected to the shared computer, at the time when the above detection has been carried out during the detecting.

11.   (PREVIOUSLY PRESENTED) The switching method according to Claim 7, further comprising posting a connection status of the shared computer to each terminal.

12.   (PREVIOUSLY PRESENTED) The switching method according to Claim 11, wherein during the posting, a state that the shared computer is currently being used is posted to each terminal, when the shared computer is currently connected to any terminal.

13.   (PREVIOUSLY PRESENTED) A computer system comprising:
at least one private computer;
a terminal corresponding to the at least one private computer;
at least one shared computer connected to a network; and
a switching device disposed between the at least one private computer and the terminal, for relaying data between the terminal and the shared computer, the switching device comprising:
a connecting unit that connects each terminal to a corresponding private computer in a default status, and switches a connection destination of the terminal to a private computer corresponding to said terminal or the at least one shared computer when a connection switching request transmitted from said terminal has been received; and
a security unit that executes, for each terminal identification processing on data that has been received from any one terminal and output to the at least one private computer or the at least one shared computer, said identification processing including utilizing an identifier corresponding to a connector through which a terminal is connected to encipher a received key code.

14. (PREVIOUSLY PRESENTED) The computer system according to Claim 13, wherein the at least one shared computer is connected to a second network independent of said network.

15. (ORIGINAL) The computer system according to Claim 13, wherein the network is the Internet.

16. (PREVIOUSLY PRESENTED) The computer system according to Claim 14, wherein the second network is an intranet.

17. (PREVIOUSLY PRESENTED) A computer system comprising:

at least one private computer;

a terminal corresponding to the at least one private computer;

at least one shared computer connected to a network; and

a switching device disposed between the at least one private computer and the terminal, for relaying data between the terminal and the at least one shared computer, the switching device comprising:

a connecting unit that connects each terminal to a corresponding private computer in a default status, and switches a connection destination of the terminal to a private computer corresponding to said terminal or the shared computer when a connection switching request transmitted from said terminal has been received; and

a security unit that executes for each terminal identification processing on data that has been received from any one terminal and output to the at least one private computer or the shared computer, said identification processing including utilizing an identifier corresponding to a connector through which a terminal is connected to encipher a received key code, the security unit comprising:

an enciphering unit that executes an enciphering processing of each terminal, of the data that has been transmitted from any one terminal and received by the switching device;

a first deciphering unit that executes a deciphering processing corresponding to the enciphering processing of the terminal corresponding to the at least one private computer, on the data that has been output from the switching device to any one private computer; and

a second deciphering unit that executes a deciphering processing corresponding to the enciphering processing local to the terminal currently connected to the shared computer, on the

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data that has been output from the switching device to the shared computer.

18.   (PREVIOUSLY PRESENTED) The computer system according to Claim 17, wherein the at least one shared computer is connected to a second network independent of said network.

19.   (ORIGINAL) The computer system according to Claim 17, wherein the network is the Internet.

20.   (PREVIOUSLY PRESENTED) The computer system according to Claim 18, wherein the second network is an intranet.

21.   (PREVIOUSLY PRESENTED) A computer system comprising:

at least one private computer;

a terminal corresponding to the at least one private computer;

at least one shared computer connected to a network; and

a switching device disposed between the at least one private computer and the terminal, for relaying data between the terminal and the at least one shared computer, the switching device comprising:

a connecting unit that connects each terminal to a corresponding private computer in a default status, and switches a connection destination of the terminal to a private computer corresponding to said terminal or the shared computer when a connection switching request transmitted from said terminal has been received; and

a security unit that executes for each terminal identification processing on the data that has been received from any one terminal and output to the at least one private computer or the at least one shared computer, said identification processing including utilizing an identifier corresponding to a connector through which a terminal is connected to encipher a received key code, the security unit comprising:

an enciphering unit that executes an enciphering processing of each terminal, on the data that has been transmitted from any one terminal and received by the switching device, the enciphering unit for bit shifting the received data in a first direction between a highest bit and a lowest bit by a number of each terminal;

a first deciphering unit that executes a deciphering processing corresponding to the enciphering processing of the terminal corresponding to the at least one private computer, on

the data that has been output from the switching device to any one private computer, the first deciphering unit for bit shifting the output data to a second direction opposite to the first direction by a number of a terminal corresponding to the at least one private computer; and

a second deciphering unit that executes a deciphering processing corresponding to the enciphering processing of the terminal currently connected to the shared computer, on data that has been output from the switching device to the shared computer, the second deciphering unit for bit shifting output data to a second direction opposite to the first direction by a number of a terminal currently connected to the at least one private computer.

22.   (PREVIOUSLY PRESENTED) The computer system according to Claim 21, wherein the at least one shared computer is connected to a second network independent of said network.

23.   (ORIGINAL) The computer system according to Claim 21, wherein the network is the Internet.

24.   (PREVIOUSLY PRESENTED) The computer system according to Claim 22, wherein the second network is an intranet.

25.   (PREVIOUSLY PRESENTED) A computer system comprising:
at least one private computer;
a terminal corresponding to the at least one private computer;
at least one shared computer connected to a network; and
a switching device disposed between the at least one private computer and the terminal, for relaying data between the terminal and the at least one shared computer, the switching device comprising:
a connecting unit that connects each terminal to a corresponding private computer in a default status, and switches a connection destination of the terminal to a private computer corresponding to said terminal or the at least one shared computer when a connection switching request transmitted from said terminal has been received, the connecting unit comprising:
a detecting unit that detects whether or not a key code of a predetermined key transmitted from any terminal has been received by a predetermined number during a predetermined period of time; and
a switching unit that cancels a connection of the terminal when the terminal has been

connected to the at least one shared computer, and switches the connection to a private computer corresponding to the terminal, that cancels a connection of the terminal when the terminal has been connected to a private computer corresponding to the terminal, and switches the connection to the at least one shared computer, and that disregards the connection switching request when a terminal other than the corresponding terminal has already been connected to the at least one shared computer, at the time when the detecting unit has performed detecting; and

a security unit that executes, for each terminal, identification processing on the data that has been received from any one terminal and output to the at least one private computer or the at least one shared computer, said identification processing including utilizing an identifier corresponding to a connector through which a terminal is connected to encipher a received key code.

26. (PREVIOUSLY PRESENTED) The computer system according to Claim 25, wherein the at least one shared computer is connected to a second network independent of said network.

27. (ORIGINAL) The computer system according to Claim 25, wherein the network is the Internet.

28. (PREVIOUSLY PRESENTED) The computer system according to Claim 26, wherein the second network is an intranet.

29. (PREVIOUSLY PRESENTED) A computer system comprising:
at least one private computer;
a terminal corresponding to the at least one private computer;
at least one shared computer connected to a network; and
a switching device disposed between the at least one private computer and the terminal, for relaying data between the terminal and the at least one shared computer, the switching device comprising:
a connecting unit that connects each terminal to a corresponding private computer in a default status, and switches a connection destination of the terminal to a private computer corresponding to said terminal or the at least one shared computer when a connection switching request transmitted from said terminal has been received;

a security unit that executes for each terminal identification processing on data that has been received from any one terminal and output to the at least one private computer or the at least one shared computer, said identification processing including utilizing an identifier corresponding to a connector through which a terminal is connected to encipher a received key code; and

a posting unit that posts a connection status of the at least one shared computer to each terminal.

30.   (PREVIOUSLY PRESENTED) The computer system according to Claim 29, wherein the at least one shared computer is connected to a second network independent of said network.

31.   (ORIGINAL) The computer system according to Claim 29, wherein the network is the Internet.

32.   (PREVIOUSLY PRESENTED) The computer system according to Claim 30, wherein the second network is an intranet.

33.   (PREVIOUSLY PRESENTED) A computer system comprising:
at least one private computer;
a terminal corresponding to the at least one private computer;
at least one shared computer connected to a network; and
a switching device disposed between the at least one private computer and the terminal, for relaying data between the terminal and the at least one shared computer, the switching device comprising:

a connecting unit that connects each terminal to a corresponding private computer in a default status, and switches a connection destination of the terminal to a private computer corresponding to said terminal or the shared computer when a connection switching request transmitted from said terminal has been received;

a security unit that executes for each terminal identification processing of the data that has been received from any one terminal and output to the at least one private computer or the at least one shared computer, said identification processing including utilizing an identifier corresponding to a connector through which a terminal is connected to encipher a received key code; and

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a posting unit that posts a connection status of the shared computer to each terminal, the posting unit for posting to each terminal that the at least one shared computer is currently being used, when the at least one shared computer is currently being connected to any terminal.

34.   (PREVIOUSLY PRESENTED) The computer system according to Claim 33, wherein the at least one shared computer is connected to a second network independent of said network.

35.   (ORIGINAL) The computer system according to Claim 33, wherein the network is the Internet.

36.   (PREVIOUSLY PRESENTED) The computer system according to Claim 34, wherein the second network is an intranet.

37.   (PREVIOUSLY PRESENTED) A switching device for controlling a
         terminal connection,
comprising:
         a connection unit adapted to connect a terminal to a private computer or a shared computer; and
         an identification processing unit coupled to said connection unit and adapted to utilize an identifier corresponding to a connector through which said terminal is connected to encipher a received code.